

Appl. No. : 10/725,281
Filed : December 1, 2003

REMARKS

In complete response to the Office Action electronically delivered on August 27, 2007 (hereinafter referred to as "the Office Action"), Applicants amend claims 18, 20, 21, 34, 40, 42, 57-59, 63, 64, 67, 69 and 72, cancel claim 19, and add new claims 73-79 as indicated in the foregoing section **Amendments to the Claims**. In light of the foregoing amendments and following remarks, Applicants respectfully assert that pending claims 18, 20-24, 34-42, and 51-79 are in condition for allowance.

Discussion of Rejection under 102(e)

Claims 18-21, 23-24, 34, 38-42, 51-55, 57-60, 65-69, and 72 have been rejected under 35 U.S.C. 102(e) as being anticipated by Kriechbaum et al. (U.S. Patent No. 6,975,985; "Kriechbaum"). A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. See M.P.E.P. § 2131. Applicants respectfully traverse the section 102 claim rejections at least because Kriechbaum does not teach or describe every element of independent claims 18, 34 or 57.

Kriechbaum discloses testing of a significantly different speech recognition application than what is claimed in the pending claims. Claim 18 (and the other pending claims) relate to testing an interactive voice response speech recognition application that recognizes words spoken in response to a prompt provided by the speech recognition application (e.g., the prompt solicits the spoken response). In testing such applications, a plurality of audio data files are collected of the spoken response. A method of testing the speech application may generally include receiving recorded audio files of responses and a grammar having expected responses to the prompt, decoding the responses based on the grammar, and scoring the decode result using a transcript of each of the plurality of audio files. The grammar has phrases (e.g., one or more words) of expected responses associated with the prompt. The speech application may comprise "one or more grammars ... one or more concepts within each grammar, and one or more phrases within each concept," (see e.g., Specification, paragraph [0038]). For example, the limitations of (method) claim 18 include:

"receiving a plurality of digital audio files, each audio file comprising audio recorded in response to a first prompt,"

"receiving a grammar associated with the first prompt, the grammar comprising a plurality of concepts, each concept having a set of phrases organized under a single idea, the idea representing an expected response to the first prompt" and

"producing a first decode result for each audio file based at least in part on the grammar."

Kriechbaum, on the other hand, discloses a dictation style continuous speech recognition system. The system automatically aligns speech recognition results from lengthy recorded audio to a transcript, and then identifies non-recognized single words that match words in the transcript. The identified words are then used to update a dictionary or pronunciation data. Kriechbaum col. 2, lines 16-27. Kriechbaum's "text aligner" invention uses time information to correlate (align) the speech recognition results and the transcript, which may be useful for long speeches, recorded books, or any application where the duration of the recorded audio is lengthy. Kriechbaum col. 2, lines 43-51. The system "provide[s] an automated technique for adapting a speech recognition system to a particular speaker." Kriechbaum, col. 2, 58-60. For example, if a famous individual had some transcribed speeches and some un-transcribed, Kriechbaum's system apparently may be used to build a model for this speaker by using the transcribed speeches, and build a model for recognizing the un-transcribed speeches. However, nowhere does Kriechbaum disclose or teach systems or methods for interactive voice response speech recognition systems.

Applicants respectfully assert that nowhere does Kriechbaum expressly disclose all the limitations of claim 18, including *"receiving a grammar associated with the first prompt, the grammar comprising a plurality of concepts, each concept having a set of phrases organized under a single idea, the idea representing an expected response to the first prompt"* or *"producing a first decode result for each audio file based at least in part on the grammar."* In fact, Kriechbaum does not disclose *any* testing of audio recorded in response to a prompt, or receiving *any* "organized" grammar structure having a set of expected responses to a prompt. Although Kriechbaum teaches that a speech recognition system may include a dictionary "a database of word pronunciations linked with word spellings," (Kriechbaum at column 1, lines 22-23) Kriechbaum's vocabulary is merely a general dictionary, not an organized or structured grammar associated with a speech application prompt, and therefore does not disclose the grammar as specifically required by the limitations of claim 18.

Kriechbaum also does not expressly disclose "receiving a plurality of digital audio data files, each audio file comprising audio recorded in response to a first prompt by a speech recognition application." The system disclosed in Kriechbaum does not receive a plurality of audio data files

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recorded responsive to a prompt, or receive *any* audio responsive to a prompt. In fact, Kriechbaum specifically teaches away from using prompt-based audio responses, instead teaching to use recorded audio and transcripts that are not generated from interactions (prompt and response), for example, publicly available radio broadcasts and audio versions of books for the “digital audio data files” (speech realizations) and corresponding transcripts. Kriechbaum col. 3, lines 41-48.

Inherency

In addition to not expressly disclosing the limitations of claim 18, Applicants respectfully assert that Kriechbaum does not inherently describe the limitations in the pending claims as broadly asserted in the Office Action. Applicants note that “in relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to support the determination that the inherent characteristic necessarily flows from the teachings of the applied prior art.” See M.P.E.P. § 2112. Applicants respectfully assert that the speech recognition invention disclosed in Kriechbaum is for a continuous dictation speech recognition, not interactive voice response speech recognition applications (e.g., prompt based) as claimed here. These speech recognition systems are vastly different in purpose, structure and functionality. Accordingly, the claimed grammar and confidence score (asserted in the Office Action to be inherently disclosed in Kriechbaum) need not necessarily be used in conjunction with *a continuous dictation system, and may in fact never be used*. Thus, Applicants respectfully request that the Examiner provide the required evidence for any further assertions that a feature is inherently disclosed.

Accordingly, for (at least) the reasons stated above, Applicants respectfully assert Kriechbaum does not expressly or inherently anticipate claim 18. Because independent claims 34 and 57 have similar limitations to claim 18, Applicants also respectfully assert claims 34 and 57 are also not anticipated by Kriechbaum for at least the same reasons. For example, the limitations of claim 34 include “a ... module for receiving a plurality of digital audio data files, each data file comprising audio recorded in response to a first prompt of a speech recognition application” and “a grammar editor module configured to access and modify a grammar ... the grammar comprising a plurality of concepts, each concept having a set of phrases organized under a single idea, the idea representing an expected response to the first prompt,” and claim 57 includes similar limitations (emphasis added). As described above, such prompt-based response testing of a speech application is not disclosed by Kriechbaum at all.

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Claims 20-21, 23-24, 38-42, 51-55, 58-60, 65-69, and 72 are either directly or indirectly dependent on the independent Claims 18, 34, and 57, and therefore also not anticipated by Kriechbaum for at least the same reasons. Accordingly, Applicants respectfully assert claims 18, 20-21, 23-24, 34, 38-42, 51-55, 57-60, 65-69, and 72 and in condition for allowance, and request the examiner withdraw the section 102 rejections.

Discussion of Rejection under 103(a)

Claims 22, 35-37, 56, 61-64, and 70-71 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Kriechbaum in view of Official Notice.

Applicants traverse this rejection. In order to provide a *prima facie* showing of obviousness under 35 U.S.C. § 103, all the claim limitations must be taught or suggested by the prior art. *See, e.g., In re Royka*, 490 F.2d 981, 180 USPQ. 580 (CCPA 1974); MPEP 2143.03. As described above, Kriechbaum discloses continuous dictations speech recognition, not prompt-response speech recognition systems or processes, and specifically does not expressly teach or suggest all of the limitations of independent claims 18, 34 or 57.

As admitted in the Office Action, Kriechbaum fails to disclose a user interface, wherein the user interface comprises a graphical user interface, wherein the graphical user interface is configured to display an output from a scoring module configured to score the recognition result based at least in part on a user-defined transcript of the audio input and the recognition result, and wherein the graphical user interface is configured to display the digital audio input and the accessed grammar. The Examiner has taken Official Notice that such user interface is well-known in the art. Applicants respectfully traverse the asserted Official Notice because although graphical user interfaces may be generally well-known in the art, particularly in computer systems, the particular features of the graphical user interface as claimed do not appear to be obvious or described in the art. Although Applicants believe that the foregoing claim amendments and/or remarks clearly obviate Kriechbaum from being used for a rejection of the pending claims under sections 102 or 103, Applicants respectfully request that proper prior art evidence be provided to support the Official Notice if such an assertion is carried forward in subsequent Office communications.

Accordingly, Applicants respectfully assert claims 22, 35-37, 56, 61-64, and 70-71 are also in condition for allowance for at least the above-described reasons as their parent claims 18, 34 or 57, and request the Examiner withdraw the section 103 rejections.

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Discussion of Claim Amendments and New Claims

Claims 18, 20, 21, 34, 40, 42, 57-59, 63, 64, 67, 69 and 72 are amended and Claims 73-79 have been added to the application. No new matter has been added. The claim amendments have been made to clarify the scope of the claims and/or for readability. The new claims and claim amendments draw support from the specification and/or the applications incorporated by reference in paragraph [0001]. The new claims depend from claims 18, 34, or 57; accordingly Applicants respectfully submit them for examination and assert that they are also in condition for allowance. In addition, the new claims add other grounds for allowance as the limitations therein are not disclosed expressly or inherently in Kriechbaum.

No Disclaimers or Disavowals

Although the present communication includes alterations to the application or claims, or characterizations of claim scope or referenced art, Applicants are not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicants reserve the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that Applicants have made any disclaimers or disavowals of any subject matter supported by the present amendments.

CONCLUSION

Applicants have endeavored to address all of the Examiner's concerns regarding section 102 and 103 claim rejections as expressed in the outstanding Office Action. In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections, and that the claims now be found in condition for allowance.

Any claim amendments which are not specifically discussed in the above remarks are not made for patentability purposes, and it is believed that the claims would satisfy the statutory requirements for patentability without the entry of such amendments. Rather, these amendments have only been made to increase claim readability, to improve grammar, and to reduce the time and effort required of those in the art to clearly understand the scope of the claim language.

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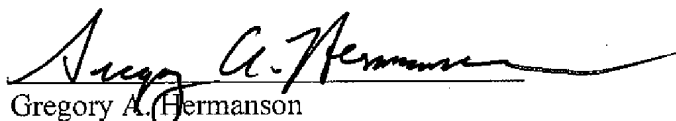
Should the Examiner have any remaining concerns that might prevent the prompt allowance of the application, the Examiner is respectfully invited to contact the undersigned at the telephone number below.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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Dated: November 27, 2007

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